Why Professionalism Matters: Lessons from the Ashes

Robert Sumwalt

The one take-away

Insist on

PROFESSIONALISM

AND INTEGRITY

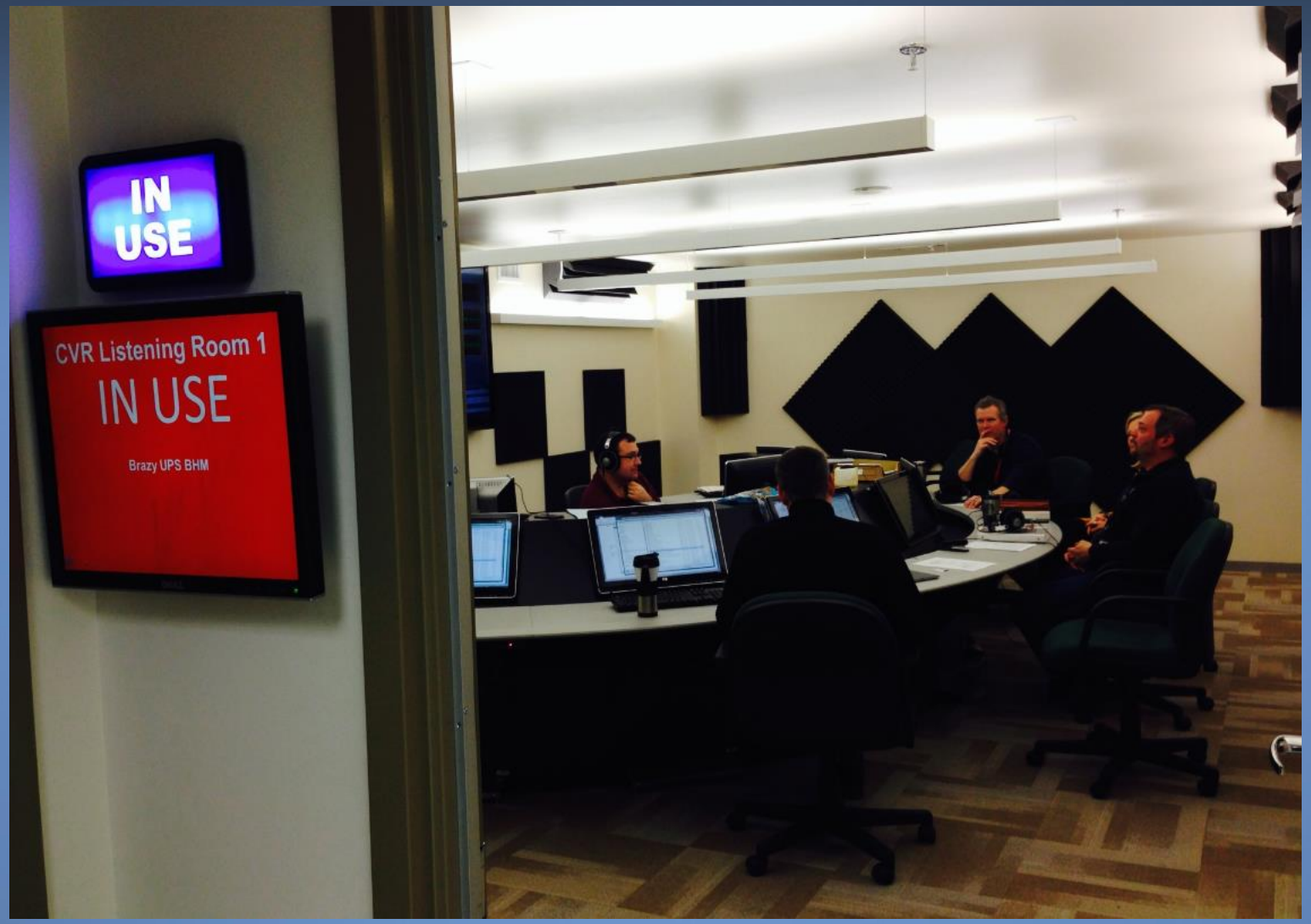
in your operation.

"The pilots' failure … was symptomatic of poor airmanship and a broader pattern of deficiencies in their CRM skills (specifically in the areas of leadership, workload management, communications/briefings, and crew coordination) …"

"the pilots' unprofessional behavior, deviation from SOPs, and poor airmanship, which resulted in an in-flight emergency from which they were unable to recover."

"The flight crewmembers' performance during the flight, including the captain's deviations from SOPs and the first officer's failure to challenge these deviations, was not consistent with the CRM training that they had received …"

NTSB


IN USE
CVR Listening Room 1
IN USE
Brazy UPS BHM

American Airlines flight 1400

“I’m ambivalent right now. I got six months to go.”

- Captain of AA 1400

"The casual atmosphere in the cockpit before takeoff affected and set a precedent for the pilots' responses to the situations…, eroded the margins of safety provided by the standard operating procedures and checklists, and increased the risk to passengers and crew."

PSA AIRLINES (D.B.A. US Airways Express)
January 2010

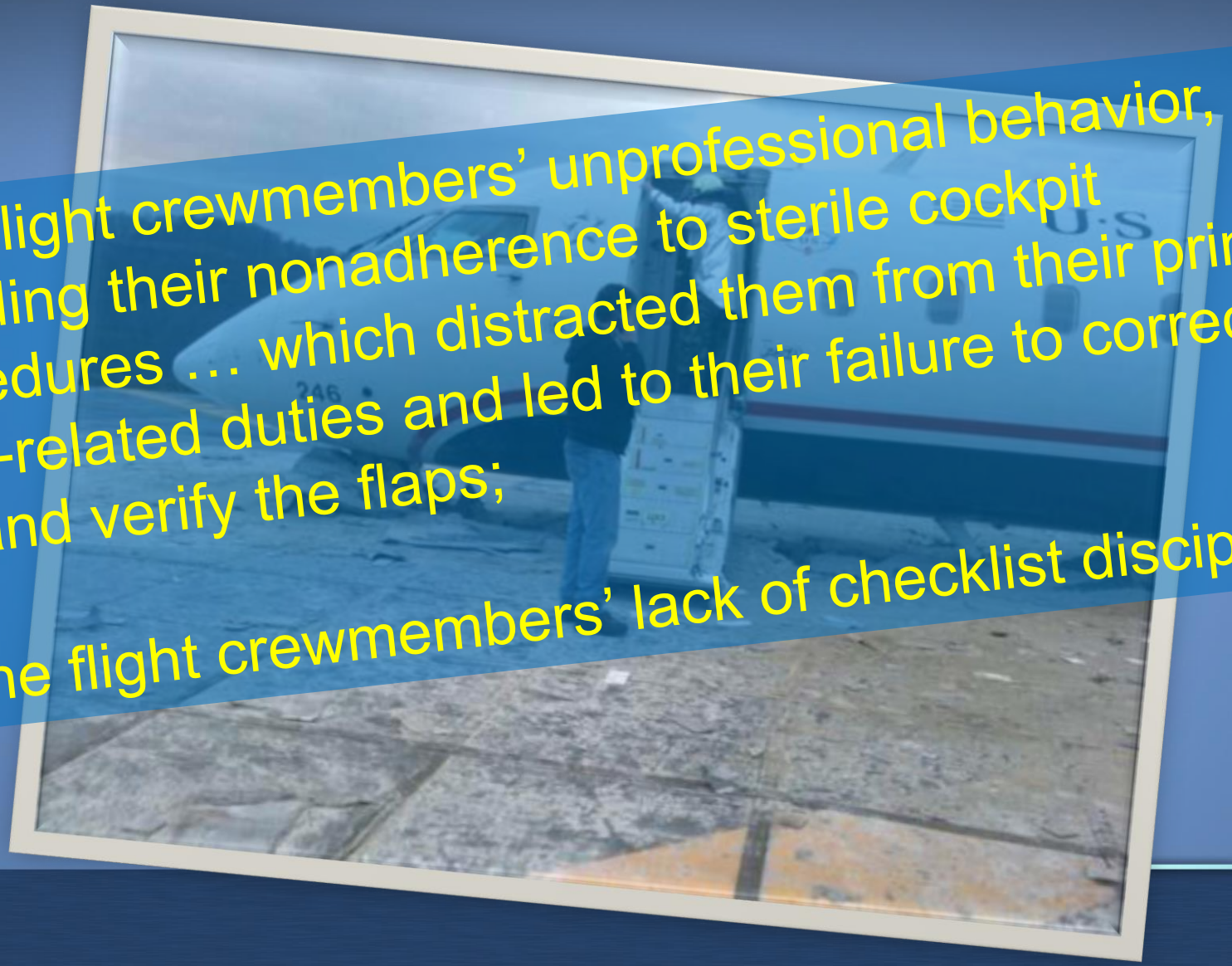
NTSB

NTSB

Who	Statement / *editorial comment*
F/O	oh we talked about you know we want fifteen acres.
Capt.	[expletive].
F/O	the house'll sit kind of in one of the front corners but back up off the road where it can't be seen.
Capt.	yeah...that's— yeah.
F/O	and we— she wants a road track built on the property.
Capt.	aww man that'd be cool as [expletive].


Approximate location
of stopped aircraft.

Lack of Professionalism



"The flight crewmembers' unprofessional behavior, including their nonadherence to sterile cockpit procedures … which distracted them from their primary flight-related duties and led to their failure to correctly set and verify the flaps;

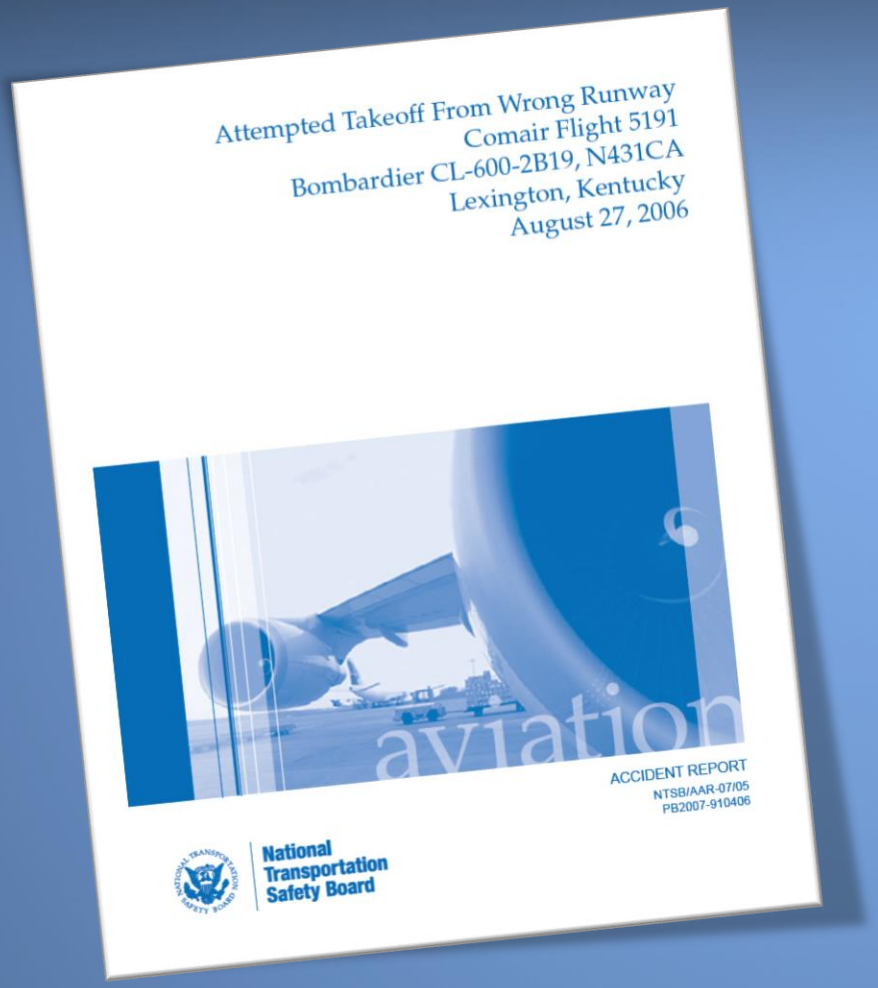
… the flight crewmembers' lack of checklist discipline."

NTSB

Comair 5191

Time	Who	Statement / *editorial comment*
05:52.11	Capt.	“I’m easy buddy.”
05:56:14	Capt.	“run the checklist at your leisure.”
05:57:36	Capt.	“Before starting, at your leisure.”
05:58:12	Capt.	“Start engines, your leisure.”
05:59:42	Capt.	“he said it’s okay to turn one at your leisure.”
05:59:45 to 06:01:47		*Crew engages in two minutes of non-pertinent conversation during engine start*
06:03:12	Capt.	“finish it up, your leisure.”
06:03:16		*First officer initiates and captain participates in, 40 seconds of nonpertinent conversation.*
06:05:15	F/O	“churlieser [‘*at your leisure’ spoken very fast*], Comair one twenty one ready to go.”

NTSB Finding



"The flight crew's noncompliance with standard operating procedures… and both pilots' nonpertinent conversation, most likely created an atmosphere in the cockpit that enabled the crew's errors."

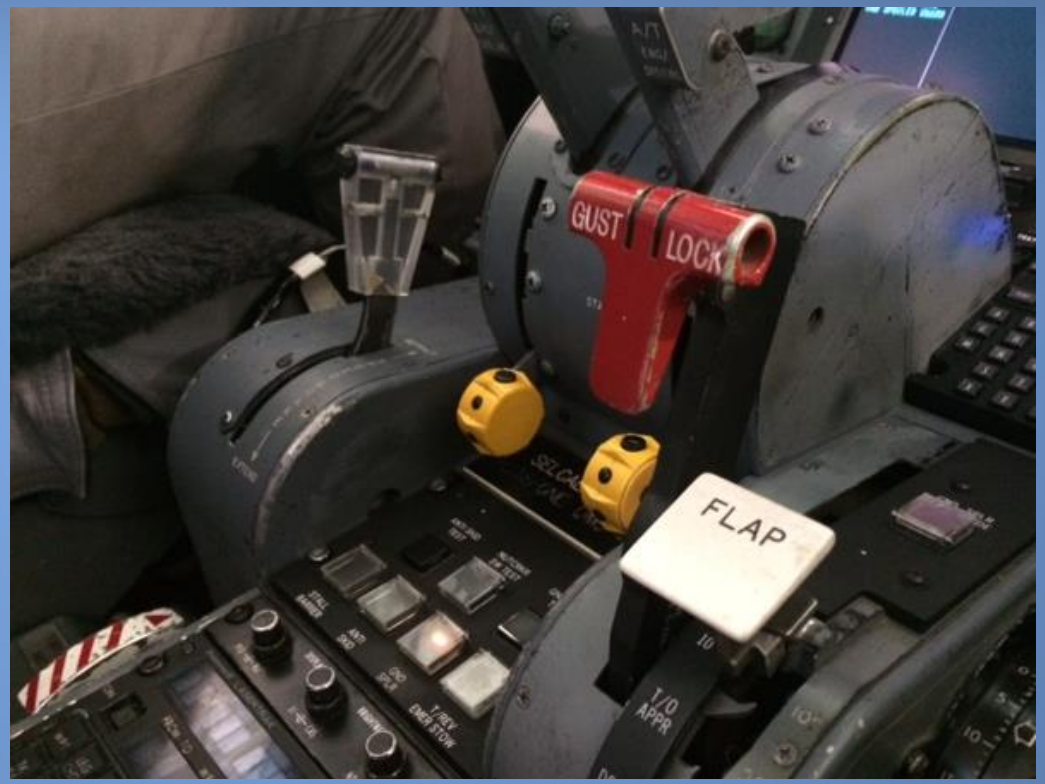
Bedford, MA

May 2014


NTSB

NTSB Investigation Found

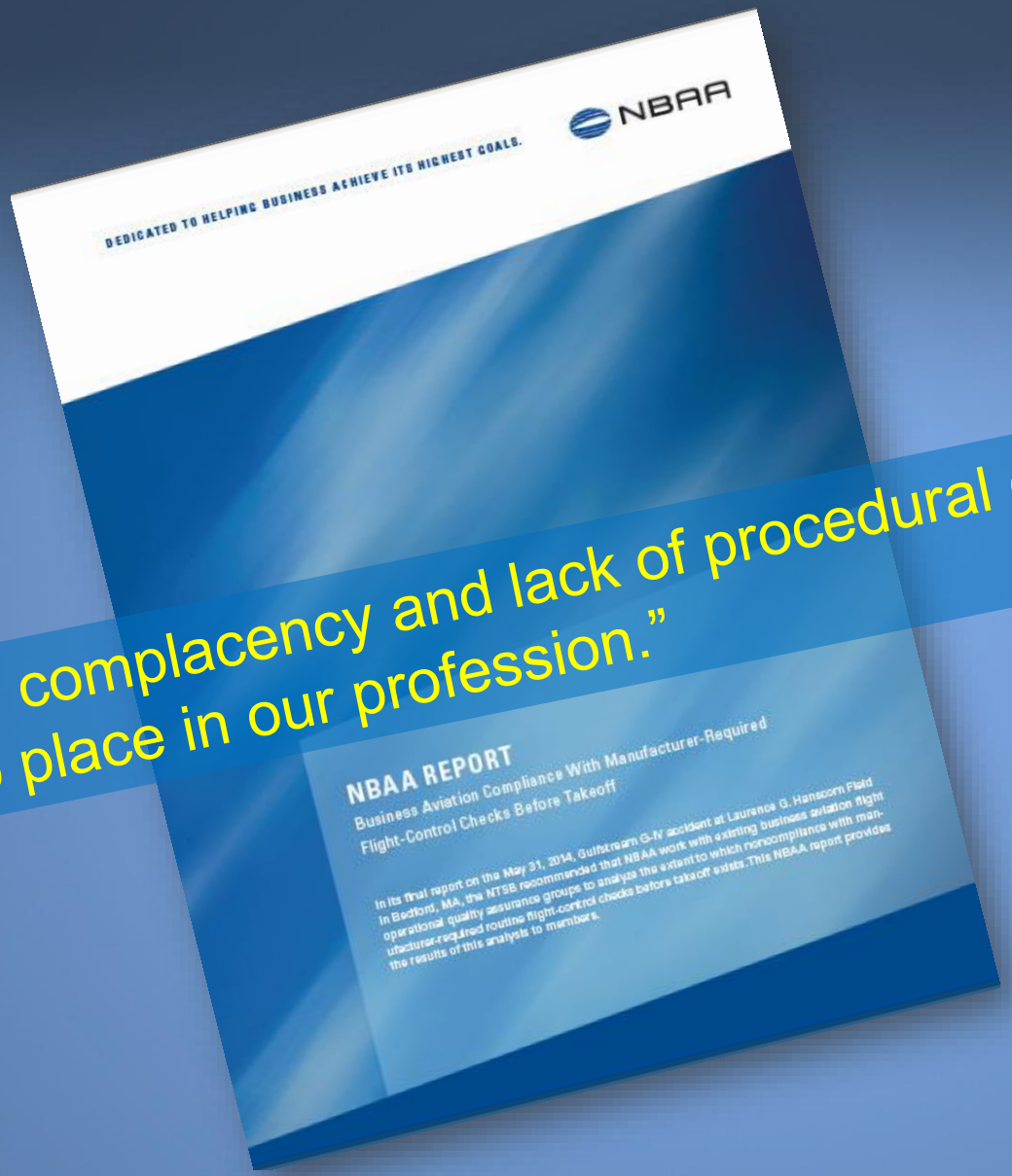
- The flight crew failed to disengage the gust lock.
- None of the five manufacturer specified-checklists were verbalized on the accident flight.
- No complete flight control check for 173 of the past 175 flights.



Probable Cause

- The NTSB determines that the probable cause of this accident was the flight crewmembers' failure to perform the flight control check before takeoff…
- Contributing to the accident were the flight crew's habitual noncompliance with checklists …

"As perplexing as it is that a highly experienced crew could attempt a takeoff with the gust lock engaged, it is equally disturbing that the data highlights a lack of professional discipline among some crews in not accomplishing manufacturer-directed checklists – particularly safety-of-flight critical items."



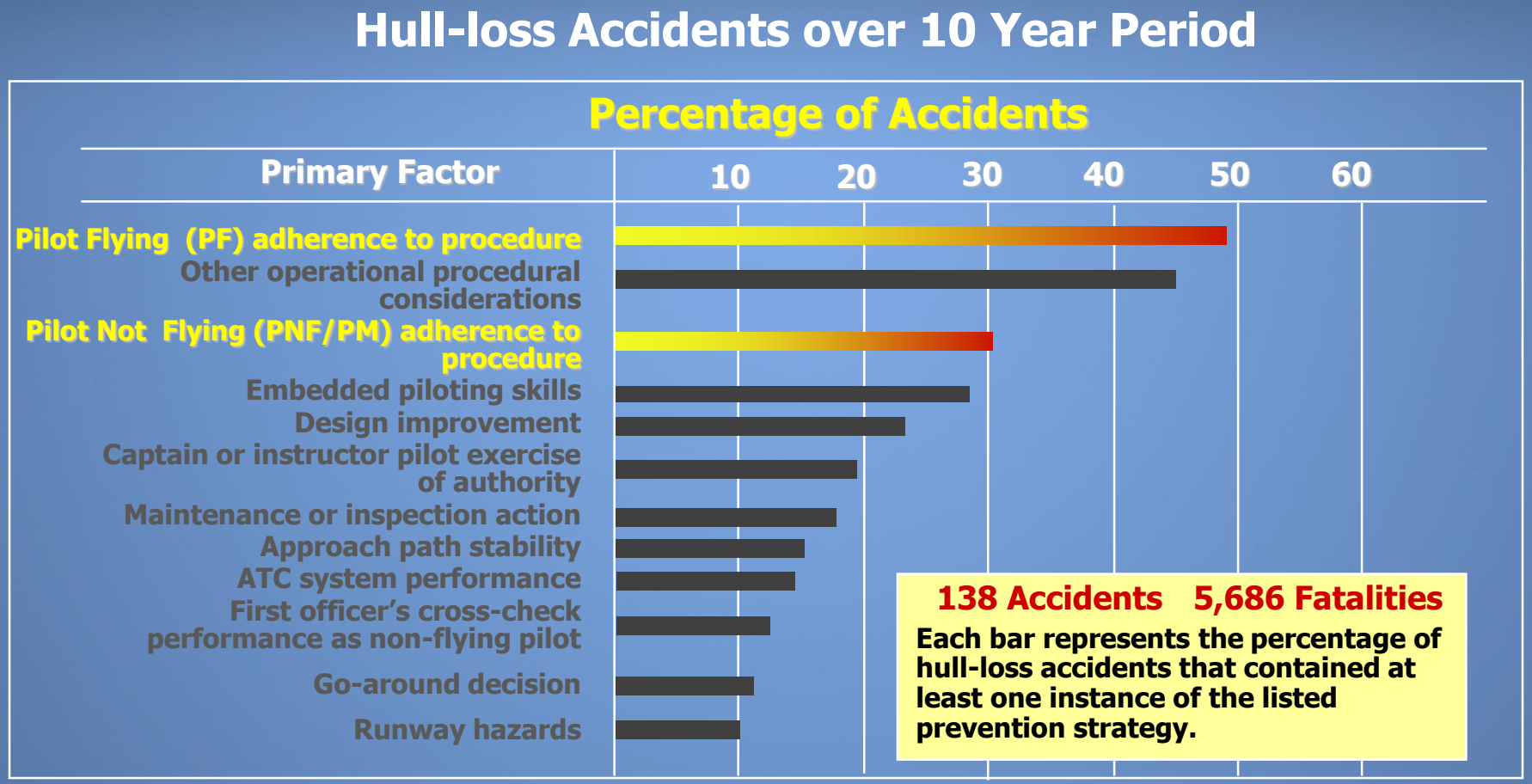
"… complacency and lack of procedural discipline have no place in our profession."

Intentional non-compliance leads to other problems

- LOSA data revealed that, compared to crews who followed SOPs, crewmembers who intentionally deviated from procedures:
  - averaged making 3 times more errors
  - mismanaged more errors
  - found themselves in more undesired aircraft situations

Accident Prevention Strategies

Source: Boeing study of accident prevention strategies



NTSB

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“Gulfstream’s focus on meeting the G650’s planned certification date caused schedule-related pressure that was not adequately counterbalanced by robust organizational processes to prevent, identify, and correct the company’s key engineering oversight errors.”

Sanford, FL

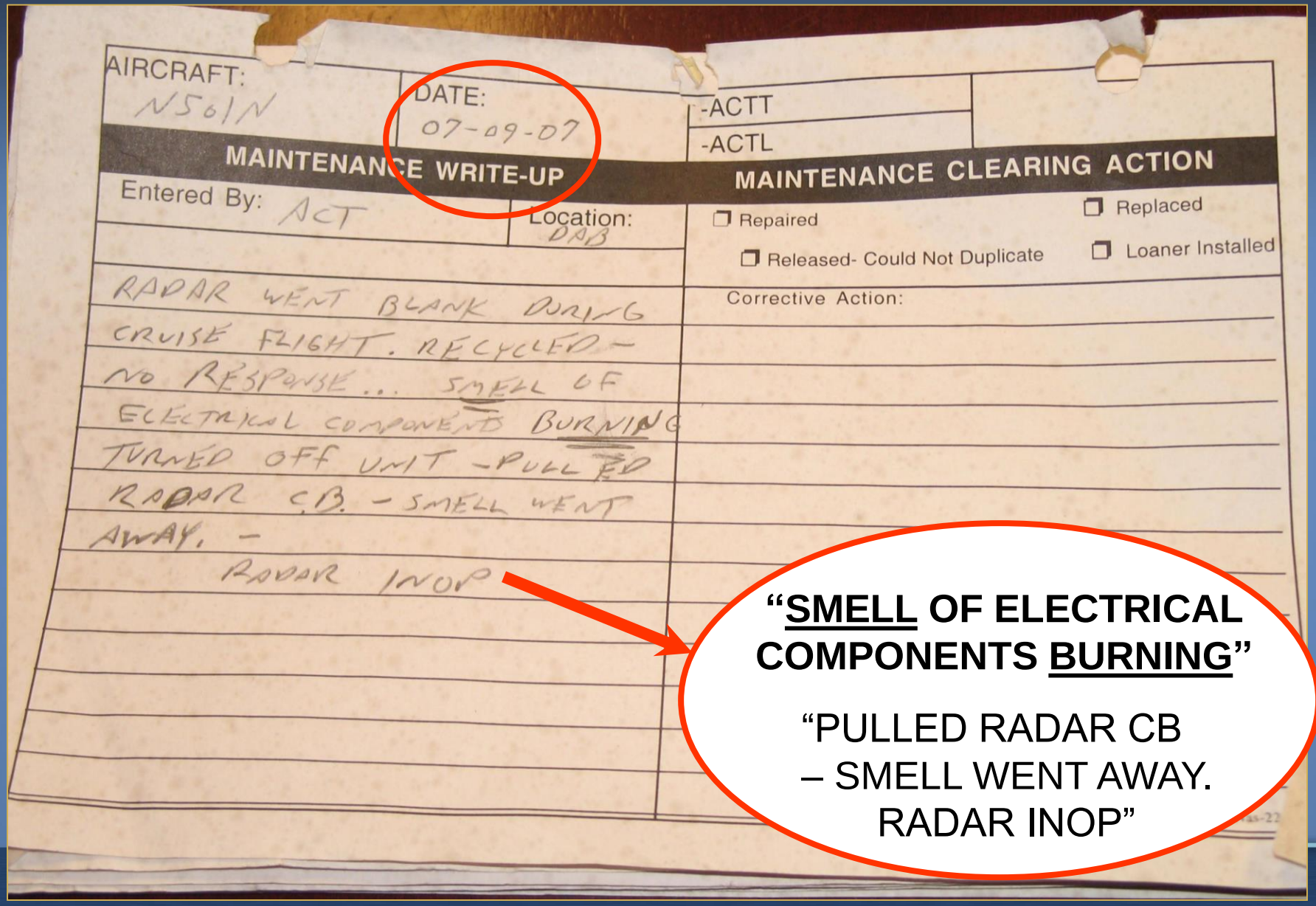
July **2007**

Declared Emergency

“Smoke in the cockpit.”

“Shutting off radios, elec.”

NTSB


AIRCRAFT:
N501N
DATE:
07-09-07
-ACTT
-ACTL
MAINTENANCE WRITE-UP
MAINTENANCE CLEARING ACTION
Entered By: ACT
Location: DAB
RADAR WENT BLANK DURING CRUISE FLIGHT. RECYCLED - NO RESPONSE... SMELL OF ELECTRICAL COMPONENTS BURNING TURNED OFF UNIT - PULLED RADAR C.B. - SMELL WENT AWAY. -
RADAR INOP
Repaired
Replaced
Released- Could Not Duplicate
Loaner Installed
Corrective Action:
"SMELL OF ELECTRICAL COMPONENTS BURNING"
"PULLED RADAR CB – SMELL WENT AWAY. RADAR INOP"

NTSB

MECHANIC: “We have a discrepancy with the airplane.”

PILOT: “I know about the radar, I don’t give a # about that, I’m taking the airplane.”

As recounted by mechanic. Source: Ops Group Factual Report. p. 24


“the actions and decisions by [the organization’s] corporate aviation division’s management and maintenance personnel to allow the accident airplane to be released for flight with a known and unresolved discrepancy, and the accident pilots’ decision to operate the airplane with that known discrepancy, a discrepancy that likely resulted in an in-flight fire.”


Akron, Ohio
November 2015

NTSB

Aerial View of Destroyed Building

Probable Cause

- The flight crew's mismanagement of the approach and multiple deviations from company standard operating procedures, which placed the airplane in an unsafe situation and led to an unstabilized approach, a descent below minimum descent altitude without visual contact with the runway environment, and an aerodynamic stall.
- Contributing to the accident were Execuflight's casual attitude toward compliance with standards; its inadequate hiring, training, and operational oversight of the flight crew; the company's lack of a formal safety program; and the Federal Aviation Administration's insufficient oversight of the company's training program and flight operations.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Free Lesson

"Learn from the mistakes of others. You won't live long enough to make them all yourself."

National Transportation Safety Board